The Rowan Suite

World Class Private Heart & Chest Care

Electrophysiology Studies and Radiofrequency Ablation

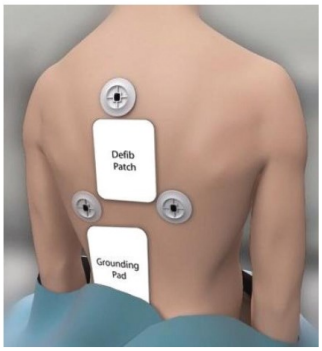
A procedure to diagnose / treat problems with heart racing and palpitations

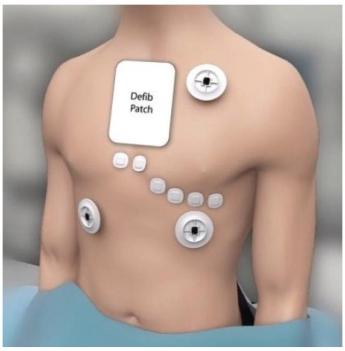
Information for Patients & Families

This leaflet has been written to provide information about treatment to correct problems with heart racing or palpitations (Electrophysiology studies and Radiofrequency Ablation). We hope it answers some of the questions or concerns you may have about the procedure. It is not intended to replace talking with medical or nursing staff.

How do I prepare for the procedure

During your setup for the procedure stickers will be applied to your chest and possibly your back to connect you to the monitoring systems. During set up the staff will ensure that your dignity is maintained at all times. The images below show where the sticker may be applied to your back and chest.





What is Electrophysiology studies and ablation?

Electrophysiology studies and ablation (sometimes known as EPS) is a procedure performed to diagnose and treat patients who are experiencing problems with heart racing or palpitations.

Why do I need EPS or ablation?

Sometimes the electrical conduction system in the heart travels in a different direction, known as ‘pathways’. When the heart has an extra beat (an ectopic), it can travel down the pathway. If this continues, fast heart rhythms or palpitations can start. If the abnormal heart rhythm is coming from the top chambers of the heart, this is known as SVT, or supra-ventricular tachycardia. This type of heart rhythm disturbance is not life threatening, but can cause unpleasant symptoms and interfere with your quality of life.

How is it done?

The procedure is done through veins at the top of your right leg and sometimes under your left collarbone. You will be awake during the procedure but you will be given a local anaesthetic to numb the skin. You may be given sedation, which could make you feel quite drowsy. A small cut is made in your groin and wires are passed through the blood vessel into your heart. This will allow the doctor to study your heart’s electrical system and find the abnormal area, which is causing your heart to race. In most patients this is a ‘short circuit’ that can be ‘burned away’ (ablated) using radiofrequency energy.

Will I have any pain or discomfort during the procedure?
This type of procedure may provoke some anxiety and there are also aspects of the procedure that may be uncomfortable or even painful. The staff will attempt to minimise this for you as much as possible by using sedative drugs and pain killers as required. They will actively monitor you throughout your procedure to ensure that you are as comfortable as possible. However, if you suffer significant pain or find the procedure unpleasant then you should inform staff immediately. The level of pain that patient's experience does vary from feeling nothing at all or minimal pain to significant pain and unfortunately this cannot be predicted. If you do experience pain and if the doctors are unable to control the discomfort then your procedure will be stopped, this happens infrequently.

How long does the procedure take?
This varies depending upon how long it takes to find the abnormal part of your heart. It usually takes about two hours, although it can be longer.

How do I prepare for the procedure?
You may be asked to attend a pre-admission clinic prior to the procedure. You will have various tests and meet with a nurse practitioner who will talk to you about the procedure and answer any questions you may have.

Before you come into hospital for the procedure it is helpful if you shave your right groin (crease at the top of your leg). You will need to have a bath or a shower. You will be informed when to stop eating and drinking prior to the procedure.

Will it be successful?
The procedure is performed regularly in this hospital and is usually very successful. If the abnormal area of the heart cannot be identified usually no harm is done and you are left no worse than before.

What are the benefits of having the procedure?
The procedure aims to diagnose and reduce, or prevent any palpitations or heart racing you may have been experiencing. You may be able to discontinue medication that you are on to control your heart racing.

What are the risks involved?
As with any procedure there is a small risk of complications. The most common kind of heart racing involves a ‘short circuit’ that lies close to the normal electrical system of the heart. It is possible to damage the heart’s normal electrical system while ‘burning away’ the ‘short circuit’. The risk of this happening is small but could result in you requiring a pacemaker. There is a small risk of collapsing the lung (pneumothorax) as the wires are passed under the left collarbone. If this happens you may require a tube inserting into your chest to reinflate the lung.

There is a small risk of bleeding around the heart (cardiac tamponade) during the procedure, which could require treatment. Any risks involved with the procedure will be discussed with you in more detail before you sign a consent form.

What alternatives do I have?

Having no treatment is sometimes an option for many people with certain types of irregular or abnormal heart rhythms.

Drugs called anti – arrhythmics and beta-blockers can be very effective at reducing heart rate and irregular heart rhythms.

Some people can control their heart racing using various techniques which can be explained by your cardiologist. These however do not work for everyone and are not always practical if you are experiencing a lot of heart racing.

Avoiding certain triggers such as coffee and alcohol can be effective in controlling palpitations in some people.

Occasionally other treatments include cardioversion (electric shock to the chest wall) and pacemakers to regulate the heart rate. Your doctor would be happy to discuss any alternative treatments if they are applicable to you.

What can I expect after the procedure?

Following the procedure you will be taken back to the ward. You will need to rest on the bed for a few hours with your leg flat. You will be able to eat and drink unless you require further tests. The nurse looking after you will check your pulse, blood pressure and observe the puncture site at regular intervals.

When can I resume normal activities?

You may be able to go home later the same day. You should rest for the remainder of the day. You will not be able to drive for 2 days. If you have a large goods licence you will not be able to drive for six weeks. You may resume normal activities the following day although you must not lift heavy objects for 1 week. You should take about 1 week off work. This advice will be discussed with you before you go home and you will be given an advice sheet.

For further information visit:

- www.lhch.nhs.uk
- www.nhs.uk
- www.bhf.co.org
- www.dipex.org
- www.heartrhythmcharity.co.uk

Or contact:

The British Heart Foundation Heart Information Line on 0300 330 331.

If you require a copy of this leaflet in any other format or language please contact us quoting the leaflet code and the language or format you require.

إذا لديك الرغبة فى الحصول على نسخة من هذه المعلومات بأيّ لغة أخرى أو بشكل آخر (على سبيل المثال بخطوط كبيرة) ، الرجاءالاتصال علينا على الرقم 0151 600 1257 موضحاً الشكل او اللغة التى ترغب فيها.
如果您想索取一份以其他語文或形式（如大字體）編印成的資料傳單，請致電 0151 600 1257向我們查詢，並說明您所需要的形式和語文。
ئەگەر ئەم زانیاریانەت بەهەر زمانێکی تر یاخود شێوازێکی تر دەوێت (بۆ نموونە بە چاپی گەورە) ئەوا تکایە بە ژمارە تەلەفۆنی 0151 600 1257 پەیوەندیمان پێوە بکە و ئامادە بدە بەو زمانەی یاخود شێوەیەی کە دەتەوێت
W celu uzyskania niniejszej informacji w innym języku lub formacie (np. dużym drukiem), prosimy o kontakt z nami pod numerem 0151 600 1257 podając wymagany format lub język.
Haddii aad u baahan tahay koobiga wargelintan oo luqad ama qaab kale (sida far waaweyn) fadlan nagala soo xiriir 0151 600 1257 adiga oo noo sheegaya luqadda ama qaabka aad wax ku rabtid.

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